## QUANDT

# PE99-010

DATE	SUBJECT	PAGE NUMBERS
02-03-99	OPENING RESUME (PROMPTED BY IE99-001)	(2) (3)
02-19-99	Letter to Chrysler from ODI. Request for information on alleged potential for the fuel filler neck to separate from the fuel tan of 1996 through 1999 DaimlerChrysler NS-minivan vehicles	(4-10) k
02-26-99	MEMO TO VRTC FROM ODI	(11-12)
04-09-99	Letter to ODI from DaimlerChrysler. Response to ODI 2/19/99 lette ATTACHMENT	r (13) (14-23)
04-09-99	Letter to OCC from DaimlerChrysler. Request for CONFIDENTIAL TREATMENT	(24-26)
02-08-99	Letter to ODI from DaimlerChryster	(27)
06-11-99	CLOSING RESUME UPGRADED EA99-013	(28-34)
07-25-00	Letter to DaimlerChrysler from NHTSA Office of Chief Counsel	(35-38)

# ODI Action Number: **PE99-010**

Date: 02-03-99

Subject:

DAIMLERCHRYSLER CORPORATION

1996 - 1999 NS-MINIVANS (DODGE CARAVAN AND GRAND CARAVAN, PLYMOUTH VOYAGER AND GRAND VOYAGER, AND CHRYSLER TOWN AND COUNTRY)

# ALLEGED POST-COLLISION FUEL SYSTEM INTEGRITY FAILURES

This file contains consumer letters received by the National Highway Traffic Safety Administration which complain of the alleged defect that is the subject of this Preliminary Evaluation. It also contains correspondence between this agency and the manufacturer on the subject. Portions of that correspondence may be withheld where the manufacturer has claimed that they are confidential pursuant to the Freedom of Information Act, 5 U.S.C. § 552(b)(4), which exempts from disclosure confidential commercial and financial information. Additional documents relating to this Preliminary Evaluation may exist, but have not been included in this public file.

If you have any information or concerns you would like to discuss with NHTSA staff, please call the

## toll free AUTO SAFETY HOTLINE

800-424-9393

(in the Washington, BC metropolitan area, please call 202-366~0123)

Also, if you wish to discuss the investigation with NHTSA staff, the HOTLINE contact representative will have a technical staff member return your telephone call.





of Transportation

National Highway

Traffic Safety

## ODI RESUME

INVESTIGATION: PE99- O\O

DATE OPENED: 3 -Feb-99

SUBJECT: Post-Collision Fuel System Integrity

PROMPTED BY: IE99-001

PRINCIPAL ENGINEER: J. L. Quandt

MANUFACTURER: DaimlerChrysler Corporation

MODEL(S): NS-minivans (Dodge Caravan and Grand Caravan, Plymouth Voyager and Grand Voyager,

and Chrysler Town and Country) MODEL YEAR(S): 1996-99

VEHICLE POPULATION: 2,000,000 estimated

PROBLEM DESCRIPTION: The filler tube hose may separate from the fuel tank in certain crash modes.

### FAILURE REPORT SUMMARY

	ODI	MANUFACTURER	TOTAL	
COMPLAINTS:	0	Unknown	0	
FIRES:	0	•	0	
INJ INCID:	O	*1	0	
# INJURIES:	o	19	0	
FAT INCID:	o	н	0	
# FATALS:	o	41-	0	
OTHER:	ì	_	l t	

DESCRIPTION OF OTHER: Fuel filler tube hose separation in a left-side impact test conducted for a NHTSA FMVSS No. 214, Side Impact Protection, compliance test.

ACTION: A Preliminary Evaluation has been opened.

ENGINEER:

DIV CIII

DATÉ

7 7 7 7

 $DA^{TE}$ 

DATE

SUMMARY: On January 5, 1999, a 1999 Dodge Caravan minivan was crash tested at the MGA Proving Ground in Burlington, Wisconsin to assess compliance with the Federal Motor Vehicle Safety Standard regarding side impact occupant protection (FMVSS No. 214). During the crash test the fuel filler tube hose separated from the fuel tank fill nipple causing approximately 11 gallons of test fuel to leak from the tank assembly. The tank, which has a nominal capacity of 20 gallons, had been filled with 18.43 gallons of Stoddard solvent for the test.





11 S. Department of Transportation

National Highway Traffic Safety Administration

## ODI SCREEN RESUME

IDENTIFICATION: IE99-001

DATE OPENED: 07-Jan-1999

SUBJECT: Fuel Filler Neck Hose Separation PROMPTED BY: Compliance Crash Test

INVESTIGATOR: Bill Duckwitz

MANUFACTURER: Chrysler Corporation

MODEL(S): Dodge Caravan MODEL YEAR(S): 1999

VEHICLE POPULATION: To Be Determined

PROBLEM DESCRIPTION: During a NHTSA left side vehicle crash test, a subject vehicle's fuel filler

neck hose was allegedly separated from the vehicle's fuel tank.

#### FAILURE REPORT SUMMARY

	Symptom # 1	N/A	N/A
COMPLAINTS:	1	0	0
CRASHES:	0	0	6
# INJURIES:	0	0	0
# FATALS:	0	0	О
FIRES:	0	0	О
OTHERS	0	0	0

DESCRIPTION OF SYMPTOM (S): Symptom 1: Fuel filler neck hose separation from the vehicle's fuel tank

ACTION; Recommend opening an PE.

INVESTIGATOR: A Day

DIVISION CHIEF:

DATE:

DATE:

SUMMARY: ODI has received information from a NHTSA crash test on a model year 1999 Dodge Caravan reporting that the vehicle's fuel filler neck hose separated from the vehicle's fuel tank during a side impact test. The report was submitted by the engineer responsible for conducting side impact tests of new vehicles. During a left side vehicle impact test at approximately 33mph, the vehicle's fuel filler neck hose separated from the fuel tank and leaked 11 gallons of fuel. If a crash were to occur in a subject vehicle, it could cause fuel leakage and result in a post-crash fire.

There have been no recalls for the subject vehicles for this issue. However, other manufacturers have issued recalls (94V-014, 91V-052, 90V-127, 89V-161) for fuel leakage from the fuel filler neck hose possibly resulting from a crash.

An investigation is recommended to ascertain the scope of the issue

Tryf

TER 19 1999

# CERTIFIED MAIL RETURN RECEIPT REQUESTED

Susan M. Cischke, Vice President Vehicle Certification, Compliance and Safety Affairs DaimlerChrysler Corporation - CIMS 482-00-91 800 Chrysler Drive Auburn Hills, MI 48326-2757 NSA-122jlq PE99-010

#### Dear Ms Cischke:

This letter is to advise you that the Office of Defects Investigation (ODI) of the National Highway Traffic Safety Administration (NHTSA) has opened a Preliminary Evaluation (PE99-010) to investigate the potential for the fuel filler neck to separate from the fuel tank of 1996 through 1999 DaimlerChrysler NS-minivan vehicles in certain side impact collision modes, and to request certain information.

On January 5, 1999, a 1999 Dodge Caravan (Vehicle Identification No. 2B4FP25B9XR221461) was crash tested at the MGA Proving Ground in Burlington, Wisconsin to assess compliance with the Federal Motor Vehicle Safety Standard (FMVSS) regarding side impact occupant protection (FMVSS No. 214). During the crash test the fuel filler neck hose separated from the fuel tank fill nipple causing approximately 11 gallons of test fluid to leak from the tank assembly.

Unless otherwise stated in the text, the following definitions apply to this information request:

- <u>Subject vehicles</u>: all 1996 through 1999 DaimlerChrysler NS-minivans.
- <u>Subject hose joint</u>: shall refer to the clamped joint between the filler neck hose and the
  fuel tank fill nipple, including the hose, the clamp, and the tank fill nipple.
- <u>Subject fuel tank assembly</u>: shall refer to the fuel storage tank, components that are
  directly attached to the tank (e.g., filler neck, fill vent tube, etc.), and all associated
  hardware (e.g., mounting straps/brackets, shields, etc.).
- <u>DaimlerChrysler</u>: DaimlerChrysler Corporation (including the entity heretofore known as "Chrysler Corporation"), and all of its past and present officers and employees,

whether assigned to its principal offices or any of its field or other locations, including all of its divisions, subsidiaries (whether or not incorporated) and affiliated enterprises and all of their headquarters, regional, zone and other offices and their employees, and all agents, contractors, consultants, attorneys and law firms and other persons engaged by or under the control of DaimlerChrysler (including all business units and persons previously referred to) who are or, in or after 1990, were involved in any way with (a) design, analysis, modification or production; (b) testing, assessment or evaluation; or (c) record-keeping, claims, or lawsuits relating to the alleged defect in the subject vehicles.

- <u>Alleged defect</u>: shall refer to collision induced fuel filler neck separation from the fuel tank.
- **Documents:** is used in the broadest sense of the word and shall mean all original written. printed, typed, recorded, or graphic matter whatsoever, however produced or reproduced, of every kind, nature, and description, and all non-identical copies of both sides thereof, including, but not limited to, papers, letters, memoranda, correspondence, communications, electronic mail (e-mail) messages (existing in hard copy and/or in electronic storage), faxes, telegrams, cables, telex messages, notes, annotations, working papers, drafts, minutes, records, audio and video recordings, data, databases, other information bases, summaries, charts, tables, graphics, other visual displays, photographs, statements, interviews, opinions, reports, newspaper articles, studies, analyses, evaluations, interpretations, contracts, agreements, jottings, agendas, bulletins, notices, announcements, instructions, blueprints, drawings, as builts, changes, manuals, publications, work schedules, journals, statistical data, desk, portable and computer calendars, appointment books, diaries, travel reports, lists, tabulations, computer printouts, data processing program libraries, data processing inputs and outputs, microfilms, microfiches, statements for services, resolutions, financial statements, governmental records, business records, personnel records, work orders, pleadings, discovery in any form, affidavits, motions, responses to discovery, all transcripts, administrative filings and all mechanical, magnetic, photographic and electronic records or recordings of any kind, including any storage media associated with computers, including, but not limited to, information on hard drives, floopy disks, backup tapes, and zip drives, and shall include any drafts or revisions pertaining to any of the foregoing, all other things similar to any of the foregoing, however denominated by you, any other data compilations from which information can be obtained, translated if necessary, into a usable form and any other documents. For purposes of this request, any document which contains any note, comment, addition, deletion, insertion, annotation, or otherwise comprises a nonidentical copy of another document shall be treated as a separate document subject to production. In all cases where original and any non-identical copies are not available, "document" also means any identical copies of the original and all non-identical copies thereof. If a document is not in the English language, provide both the original document and an English translation of the document.

The submitted information is to include all documents responsive to each request that appears below. For any oral communication, identify the date on which the communication took place and the names, positions, and employers of the parties involved, and relate the substance or provide a memorandum or transcript (if one is available) of the communication.

In order for my staff to evaluate the alleged defect, certain information is required. Pursuant to 49 U.S.C. § 30166, please provide numbered responses to the following questions. Please repeat each question verbatim before the response. Also, at the beginning of each response, identify each source of information used as the basis for any portion of that response, and indicate the last date upon which information was gathered for, or otherwise placed in, that source of information prior to the date when the information submitted in your response was retrieved from that source of information. Insofar as Ford has previously provided a document to ODI, Ford may identify that document with particularity as stated below or produce it again. In identifying each such document, Ford is required to state:

- a. description of the type of document (e.g., letter, memorandum, report, etc.);
- the date on the face of the document or, if no such date appears, the date of receipt or preparation;
- c. its title;
- d. its subject matter and the total number of pages of the document;
- e. the identity of its originator and signers, if any, on its face;
- f. the identity of its addressee(s) and each recipient on its face; and
- g. the identity of the document submission to NHTSA in which it was included and the precise location in that submission where the document is located.

If DaimlerChrysler cannot answer any specific question, please state the reason why it is unable to do so. If DaimlerChrysler claims that any information or material responsive to any of the following items need not be divulged to the NHTSA because it is privileged, or the work product of an attorney, state the nature of that information or material and identify any document in which it is found by date, subject or title, name and position of person from, and person to, whom it was sent, and name and position of any other recipient. You must also describe the basis for the claim, and explain why you believe it applies.

- State the number of subject vehicles DaimlerChrysler has sold in the United States by model, wheel base, door option, and model year.
- State the number and provide copies of all of the following, from all sources, of which DaimlerChrysler is aware and which allege incidents of collision induced fuel filler neck separation, fuel spillage, or fire in the subject vehicles.
  - a. owner/fleet complaints;
  - b. field reports;
  - c. injury claims;



- d. subrogation claims;
- e. lawsuits; and
- f. third-party arbitration proceedings (where DaimlerChrysler is a party to the arbitration).

Please list and collate your responses for each category ("a" through "f") by model year and date of claim. Please provide for each item in this response the incident date, mileage of vehicle at time of incident (if known), vehicle date of build, disposition of matter, and, where a fleet vehicle is involved, the name of the fleet, and the name and telephone number of a contact person at that fleet. For items "a" through "d," please provide all related information and reports whether or not DaimlerChrysler has verified each one. For items "e" and "f," summaries are acceptable. Please identify in the summary the caption, court, docket number, and filing date of each lawsuit if a copy of the Complaint initiating the lawsuit is not provided.

- 3. Provide copies of all engineering specifications, engineering standards, and design guidelines, or equivalent documents, that relate in any way to the performance of the fuel system of the subject vehicles (or to DaimlerChrysler vehicles in general) in a crash environment (i.e., post-crash fuel system integrity or containment). Provide this information for both vehicle level and component level specifications.
- Provide copies of all Failure Mode and Effects Analyses regarding the subject fuel tank assembly.
- 5. Provide a comprehensive listing of all left-side impact crash testing that DaimlerChrysler has conducted on the subject vehicles. Include in your response all such testing conducted on pre-production prototypes of the subject vehicles. Furnish the information by test number, test date, model year, make, model, body style, vehicle identification number, and test method (e.g., FMVSS No. 301, FMVSS No. 214, any other tests conducted by DaimlerChrysler). State whether DaimlerChrysler is aware of any crash tests conducted on subject vehicles or prototypes that resulted in any leakage from the filler neck assembly.
- State whether DaimlerChrysler has conducted any computer aided analyses of the crash performance of the subject fuel tank assembly and, if so, describe the analysis and provide copies of all relevant documents.
- 7. Provide copies of all test reports, photographs, and videotapes for each of the crash tests identified in the list provided by DaimlerChrysler.
- 8. Identify and describe all significant modifications or changes made by or on behalf of DaimlerChrysler in the manufacture, design, or material composition of the fuel tank assembly used in the subject vehicles from pre-production development to date that could relate to the alleged defect. The following information must be included for each such modification or change:

- a. the date, or approximate date on which the modification or change was incorporated into production;
- a description of the modification or change;
- the scope of the modification or change (i.e., state which of the subject vehicles were affected by the change);
- d. the reason for the modification or change; and
- e. the part number of the modified part.
- 9. Provide engineering drawings of the subject hose joint and provide the following dimensions, tolerances, and properties:
  - a. tank fill nipple bead back angle;
  - b. tank fill nipple bead ramp angle;
  - c. tank fill nipple bead length;
  - d. state the material composition the hose and tank nipple materials;
  - e. state the hardness of the hose material; and
  - state the modulus of elasticity, shear modulus of elasticity, and Poisson's ratio for the tank nipple and hose materials.
- 10. Furnish the following dimensions, in millimeters, for both the short- and long-wheelbase subject vehicles:
  - a. the longitudinal dimension from the front axle centerline to the rear axle centerline;
  - b. the longitudinal dimension from a vertical plane passing through the front axle centerline and the center of the fuel tank nipple weld and the center of the fuel tank nipple end:
  - c. the longitudinal dimension from a vertical plane passing through the front axle centerline and the axis of the front bolt for the left rear leaf spring;
  - d. the longitudinal dimension from a vertical plane passing through the front axle centerline and the center of the filler neck tube bottom end, the center of the filler neck tube top end (filler cap position), each bend in the filler neck tube, and the center of the filler door:
  - e. the longitudinal dimension from a vertical plane passing through the front axle centerline to the axis of the rail mounting bolt for the left rear shock absorber;
  - f. the lateral dimension from sill pinch flange to sill pinch flange across the vehicle at the fuel tank nipple:
  - g. the lateral dimension from a vertical plane passing through the vehicle centerline to the left sill pinch flange, the vertical wall of the sill, and the outboard side of the left rail (show all at the fuel tank nipple);
  - h. the lateral dimension from a vertical plane passing through the vehicle centerline to the outer edge dimensions of the filler neck tube bottom end, the filler neck tube top end (filler cap position), each bend in the filler neck tube, and the filler door;
  - the vertical dimension from the bottom edge of the sill pinch flange to the axis of the front bolt for the left rear leaf spring, the bottom edge of the fuel tank nipple weld, the



- bottom of the rail, and the axis of the rail mounting bolt for the left rear shock absorber; and:
- j. the vertical dimension from the bottom edge of the fuel tank nipple to the lower dimensions of the tank nipple end, the filter neck tube bottom end, the filter neck tube top end (filter cap position), and each bend in the filter neck tube.
- 11. Provide the following information regarding the subject hose joint design:
  - a. identify all aspects of the joint which will resist hose separation from the fuel tank nipple when the joint is subject to bending, twisting, or axial loads;
  - identify all other vehicle design provisions, other than those specifically involving the subject hose joint, that are intended to help avoid separation of the filler tube from the tank during impact;
  - c. describe DaimlerChrysler's process (either during pre-production design and development or at any time thereafter) for verifying the ability of the design features identified in "a" and "b" to resist filler tube separation when subjected to crash forces and furnish copies of any and all documents related to such verification, evaluation, or testing;
  - d. state all separation forces, by direction and magnitude, used by Chrysler to test the subject joint ("separation forces" should be interpreted as any forces imparting a tensile load on the subject joint, whether or not separation actually occurs - if no separation occurs, state the maximum force applied);
  - e. identify and describe all computer aided analyses DaimlerChrysler has conducted to assess the integrity of the subject hose joint and/or the crash performance of the subject fuel tank assembly; and
  - f. provide copies of any information DaimlerChrysler possesses which show the performance of the subject fuel tank assembly when subjected to collisions more directly targeted on the filler neck than the crash tests performed in FMVSS 214D and 301.
- 12. Identify and provide copies of all documents reflecting any study, survey, and investigation pertaining to the alleged defect that is known to DaimlerChrysler. Include in your response all notes, measurements, calculations, reports, photographs, and other documents related to DaimlerChrysler's analysis of issues related to the alleged defect. Include all pertinent documents, regardless of whether they are in interim, draft, or final form.
- 13. Provide the specified number of samples of each of the following components:
  - a. fuel filler necks, short-wheelbase (2) and long-wheelbase (1);
  - b. fuel filler neck hose (12);
  - c. fuel filler neck hose clamps (12); and
  - d. fuel tank fill nipple (2).



This letter is being sent to your company pursuant to 49 U.S.C. § 30166 which authorizes NHTSA to conduct any investigation that may be necessary to enforce Chapter 301 of Title 49. Your failure to respond promptly and fully to this letter could subject DaimlerChrysler to civil penalties pursuant to 49 U.S.C. § 30165 or lead to an action for injunctive relief pursuant to 49 U.S.C. § 30163.

Your response to this letter, in duplicate, must be submitted to this office by April 9, 1999. Please include in your response the identification codes referenced on page one of this letter. If you find that you cannot provide all of the requested information within the time allotted, you must request an extension from Mr. Thomas Z. Cooper, Chief, Vehicle Integrity Division, no later than ten business days before the required response date. You may telephone Mr. Cooper at (202) 366-5218 to request an extension, but must confirm your request in writing. If circumstances prevent you from submitting all information requested by the due date, you must submit by that date whatever information you then have available.

If you consider any portion of your response to be confidential information, include that material in a separate enclosure to ODI marked confidential. In addition, you must submit a copy of all such material to the Office of Chief Counsel (NCC-30), National Highway Traffic Safety Administration, 400 Seventh Street, SW, Washington, DC 20590, and comply with all other requirements for the submission of confidential business information stated in 49 CFR Part 512.

If you have any technical questions concerning this matter, please contact Mr. Jeff Quandt of my staff at (202) 366-5207.

Sincerely,

Thomas Z. Cooper, Chief Vehicle Integrity Division Office of Defects Investigation

FEE 26 03

Test Request: Crash Induced Filler Neck Separation

Kathleen C. DeMeter, Director Office of Defects Investigation

NSA-122jlq PE99-010

Mike Monk, Director Vehicle Research and Test Center

This requests the Vehicle Research and Test Center (VRTC) to conduct the work described below.

BACKGROUND: On January 5, 1999, a 1999 Dodge Caravan minivan was crash tested at the MGA Proving Ground in Burlington, Wisconsin to assess compliance with the Federal Motor Vehicle Safety Standard regarding side impact occupant protection (FMVSS No. 214). During the crash test the fuel filler tube hose separated from the fuel tank fill nipple causing approximately 11 gallons of test fuel to leak from the tank assembly. The tank, which has a nominal capacity of 20 gallons, had been filled with 18.43 gallons of Stoddard solvent for the test. ODI opened an Preliminary Evaluation (PE99-010) on February 3, 1999, to investigate the potential for crash induced filler neck separation in 1996 through 1999 model year Chrysler minivans. Two long-wheelbase 1999 Chrysler minivans were also crash tested recently at the MGA test facility as part of the side impact portion of NHTSA's New Car Assessment Program (NCAP). The three crash test vehicles are identified below.

NHTSA No.	VIN
CX0305	2B4FP25B9XR221461
MX0301	2B4GP24G1XR186884
MX0307	2B4GP24G0XR186889

<u>SCOPE</u>: The subject vehicles are 1996 through 1999 Chrysler NS-minivans (Dodge Caravan and Grand Caravan, Dodge Voyager and Grand Voyager, and Chrysler Town and Country).

#### OBJECTIVES:

1. To transport the vehicles from the MGA Proving Ground in Burlington, Wisconsin to the Vehicle Research and Test Center in East Liberty, Ohio.

To conduct inspections, measurements, and disassembly of the three crash test vehicles to aid in ODI's investigation of factors which may contribute to filler neck separation in side impact collisions in the subject vehicles.

**RECOMMENDED APPROACH:** Transfer the vehicles and conduct inspections, measurements, and disassembly as deemed appropriate in consultation with ODI.

**SCHEDULE:** The target completion date for objectives 1 and 2 is April 15, 1999.

<u>Additional Information</u>: The project engineer is Jeff Quandt, (202) 366-5207. All questions concerning the testing should be directed to him.

#





# Daimler Chrysler

. 99 728 12 AM 9: 13

April 9, 1999

#FFECTS INVESTIGATION

Thomas Z. Cooper, Chief Vehicle Integrity Division Office of Defects Investigation National Highway Traffic Safety Administration 400 Seventh Street S.W. (NSA-12; Room 5326) Washington, D.C. 20590 DaimlerChrysler Corporation

Susan M. Cischike Vice President Vehicle Certification, Compliance & Safety Affairs

Re: NSA-122jlq; PE99-010

Dear Mr. Cooper:

This responds to your February 19, 1999 information request for Preliminary Evaluation (PE) 99-010 investigating the potential for the fuel filler hose to separate from the fuel tank of 1996 through 1999 DaimlerChrysler NS-minivan vehicles in certain side impact collision modes.

Thank you for prompt notification concerning observations from NHTSA tests, and for opportunities provided to examine NHTSA's test properties. DaimlerChrysler has not observed similar filler hose separation in any side impact crash tests we have conducted with the subject vehicles. Nor have we observed fuel leaks from other locations during these crash tests

As reported in the body of our response to the cuestions, we have searched for but not found any reports from customers or other sources of field experience that similar events have occurred on the road.

Several questions ask for information that is confidential. Responses to those are being supplied separately with a request for treatment as confidential business information to the NHTSA Chief Counsel's Office.

We welcome discussion of questions you have during your review of this response.

Sincerely,

🕰 Susan M. Çişçhke

K Edwards

Attachment Enclosures

cc: Heidi Coleman

<u>ATTACHMENT</u>

Mr. Thomas Z. Cooper Ro: NSA-122jlg; PE99 010

April 9, 1999 Page 1 of 4

- Q1 State the number of subject vehicles DaimlerChrysler has sold in the United States by model, wheel base, door option, and model year.
- A1 The numbers of vehicles built for sale in the United States are provided in Enclosure 1.
- Q2 State the number and provide copies of all of the following, from all sources, of which DaimlerChrysler is aware and which allege incidents of collision induced fuel filler neck separation, fuel spillage, or fire in the subject vehicles.

a.owner/fleet complaints; b.field reports; c.injury claims; d.subrogation claims; e.lawsuits; and

t.third-party arbitration proceedings (where DaimlerChrysler is a party to the arbitration).

Please list and collate your responses for each category ("a" through "f") by model year and date of claim. Please provide for each item in this response the incident date, mileage of rehicle at time of incident (if known), vehicle date of build, disposition of matter, and, where a fleet vehicle is involved, the name of the fleet, and the name and felephone number of a contact person at that fleet. For items "a" through "d," please provide all related information and reports whether or not DaimlerChrysler has verified each one. For items "e" and "f," summaries are acceptable. Please identify in the summary the caption, court, docket number, and filing date of each lawsuit if a copy of the Complaint initiating the lawsuit is not provided.

- A2 DaimlerChrysler is aware of no allegations or complaints from any source of left side collision induced fuel filler neck separation, fuel spillage, or fire in the subject vehicles
- Q3 Provide copies of all engineering specifications, engineering standards, and design guidelines, or equivalent documents, that relate in any way to the performance of the fuel system of the subject vahicles (or to DaimlerChrysler vehicles in general) in a crash environment (i.e., post crash fuel system integrity or containment). Provide this information for both vehicle level and component level specifications.
- A3 Copies of the requested internal documents are being provided separately, with our request for treatment as confidential business information.
- Q4 Provide copies of all Failure Mode and Effects Analyses regarding the subject fuel tank assembly.
- Design concept development of the subject fuel tank assembly was substantially completed during calendar year 1992. Failure Mode and Effects Analyses (FMEAs) created as a part of that design and consequent development process are not routinely archived after vehicles are introduced into volume production, and are not, therefore, available to provide with this response. The concept of protecting against this particular alleged failure mode was included in design and development process. Side impact testing of these vehicles included, and continues to include, simulated fuel loads, similar to that used in NHTSA's testing. As reported in A5, below, no leakage has been observed in any of these tests.
- Q5 Provide a comprehensive listing of all left-side impact crash testing that DaimlerChrysler has conducted on the subject vehicles. Include in your response all such testing conducted on pre-production

Mr. Thomas Z. Copper Re: NSA-122jlq; PE99-010 April 9, 1999 Page 2 of 4

#### **ATTACHMENT**

prototypes of the subject vehicles. Furnish the information by test number, test date, model year, make, model, body style, vehicle identification number, and test method (e.g., FMVSS No. 301, FMVSS No. 214, any other tests conducted by DaimlerChrysler). State whether DaimlerChrysler is aware of any crash tests conducted on subject vehicles or prototypes that resulted in any leakage from the filler neck assembly.

A5 DaimlerChrysler knows of nois de crash tests resulting in leakage from the filler neck assembly other than those recently conducted by NHTSA.

The requested list of "all testing" is included with the test details required by Q7 in a separate enclosure, provided with a request for treatment as confidential business information

- Q6 State whether DaimlerChrysler has conducted any computer aided analyses of the crash performance of the subject fuel tank assembly and, if so, describe the analysis and provide copies of all relevant documents.
- Ać DaimlerChrysler has not conducted any computer-aided analysis of the crash performance of the subject finel tank assembly.
- QZ Provide copies of all test reports, photographs, and videotapes for each of the crash tests identified in the list provided by DaimlerChrysler.
- A7 The requested materials are provided in a separate enclosure, provided with a request for treatment as confidential business information.
- OB Identify and describe all significant modifications or changes made by or on behalf of DaimlerChrysler in the manufacture, design, or material composition of the fuel tank assembly used in the subject vehicles from pre-production development to date that could relate to the alleged defect. The following information must be included for each such modification or change:

a.the date, or approximate date on which the modification or change was incorporated into production; b.a description of the modification or change;

 c.the scope of the modification or change (i.e., state which of the subject vehicles were affected by the change);

d.the reason for the modification or change; and

c.the part number of the modified part.

- A8 One significant modification has been made to the fuel tank assembly to improve the control of evaporative emissions.
  - a. neorporated into production during October 1995.
  - b. The fuel tank wall was changed from a monolayer to coextruded construction with a vapor barrier between the inner and outer layers. The fuel inlet nipple into the tank from the filler assembly was changed at the same time from being molded with the tank then machined to shape, to being a separately molded part, which is then welded onto the major tank molding. Dimensions of the inlet nipple, including its bead, are identical for the early and current designs.
  - All vehicles were affected by this change.
  - The change was made to meet more demanding evaporative emission control requirements.
  - e. The modified part number was 04809487.

ALI<u>ACH</u>MENT

Mr. Thomas Z. Cooper Re: NSA-122jlq; PE99-010 April 9, 1999

Page 3 of 4

- Q9 Provide engineering drawings of the subject hose joint and provide the following dimensions, tolerances, and properties:
  - a tank till nipple bead back angle;
  - b.tank fill nipple bead ramp angle;
  - c.tank fill nipple bead length;
  - distate the material composition the hose and tank nipple materials;
  - e. state the hardness of the hose material; and
  - state the modulus of elasticity, shear modulus of elasticity, and Poisson's ratio for the tank nipple and hose materials.
- Α9 The requested crawing and information materials are provided in a separate enclosure, provided with a request for treatment as confidential business information.
- Q10 Furnish the following dimensions, in millimeters, for both the short- and long-wheelbase subject vehicles:
  - a the longitudinal dimension from the front axle centerline to the rear axle centerline;
  - b, the longitudinal dimension from a vertical plane passing through the front axle centarline and the center of the fuel tank nipple weld and the center of the fuel tank nipple end;
  - c the longitudinal dimension from a vertical plane passing through the front axle centerline and the axis of the front bolt for the left rear leaf spring;
  - d the longitudinal dimension from a vertical plane passing through the front axle centerline and the center of the filler neck tube bottom end, the center of the filler neck tube top end (filler cap position), each bend in the filler neck tube, and the center of the filler door;
  - e the longitudinal dimension from a vertical plane passing through the front axle centerline to the axis of the rail mounting bolt for the left rear shock absorber;
  - f,the lateral dimension from sill pinch flange to sill pinch flange across the vehicle at the fuel tank
  - g the lateral dimension from a vertical plane passing through the vehicle centerline to the left sill pinch flange, the vertical wall of the sill, and the outboard side of the left rail (show all at the fuel tank nipple);
  - h,the lateral dimension from a vertical plane passing through the vehicle centerline to the outer edge dimensions of the filler neck tube bottom end, the filler neck tube top end (filler cap position), each bend in the filler neck tube, and the filler door,
  - i,the vertical dimension from the bottom edge of the sill pinch flange to the axis of the front bolt for the left rear leaf spring, the bottom edge of the fuel tank nipple weld, the bottom of the rail, and the axis of the rail mounting bolt for the left rear shock absorber; and;
  - j,the vertical dimension from the bottom edge of the fuel tank nipple to the lower dimensions of the tank nipple end, the filler neck tube bottom end, the filler neck tube top end (filler cap position), and each bend in the filler neck tube.
- The requested dimensions are provided in Enclosure 2 for both the short wheelbase (SWB) and long wheelbase (LWB) body type vehicles.
- Q11 Provide the following information regarding the subject hose joint design:
  - a identify all aspects of the joint which will resist hose separation from the fuel tank nipple when the joint is subject to bending, twisting, or axial loads;
  - b.identify all other vehicle design provisions, other than those specifically involving the subject hose joint, that are intended to help avoid separation of the filler tube from the tank during impact;
  - a describe DaimlerChrysler's process (either during pre-production design and development or at any time thereafter) for verifying the ability of the design features identified in "a" and "b" to resist filler

**ATTACHMENT** 

Mr. Thomas Z. Cooper Re: NSA-122jlq; PE99-010 April 9, 1999 Page 4 of 4

tube separation when subjected to crash forces and furnish cupies of any and all documents related to such verification, evaluation, or testing;

- d state all separation forces, by direction and magnitude, used by Chrysler to test the subject joint ("separation forces" should be interpreted as any forces imparting a tensile load on the subject joint, whether or not separation actually occurs if no separation occurs, state the maximum force applied);
- e.identify and describe all computer aided analyses DaimlerChr/sler has conducted to assess the integrity of the subject hose joint and/or the crash performance of the subject fuel tank assembly; and
- f.provide copies of any information DaimlerChrysler possesses which show the performance of the subject fuel tank assembly when subjected to collisions more directly targeted on the filler nock than the crash tests performed in FMVSS 214D and 301.
- A11 The requested design information and design practice information are provided in a separate enclosure, provided with a request for treatment as confidential business information.
- Q12 Identify and provide copies of all documents reflecting any study, survey, and investigation pertaining to the alleged defect that is known to DaimlerChrysler. Include in your response all notes, measurements, calculations, reports, photographs, and other documents related to DaimlerChrysler's analysis of issues related to the alleged defect. Include all pertinent documents, regardless of whether they are in interim, draft, or final form.
- A12 DaimlerChrysler provided notes, measurements, and other documents related to this issue with our voluntary submission to NHTSA concerning PE99-010 on February B, 1999. Additional documents are being provided in a separate enclosure, provided with a request for treatment as confidential business information.
- Q13 Provide the specified number of samples of each of the following components:
  a.fuel filler necks, short-wheelbase (2) and long-wheelbase (1);
  b.fuel filler neck hose (12);
  c.fuel filler neck hose clamps (17); and
  d.fuel tank fill nipple (2).
- A13 The requested samples are being shipped separately to your attention.



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## PRODUCTION FOR U.S.A. THROUGH APRIL 3, 1999

Model Year	<u>Wheelbase</u>	<u>Model</u>	4 Doors	3 Doors
1996	SWB	Voyager	37602	43192
1996	SWB	Caravan	70635	62073
1996	SWB	Town & Country	5459	0
1996	LWB	Grand Voyager	91443	11657
1996	LWB	Grand Caravan	199527	16736
1996	LWB	Town & Country	101927	5
1997	SWB	Voyager	43216	18556
1997	SWB	Caravan	76746	29976
1997	SWB	Town & Country	2807	0
1997	LWB	Town & Country AWD	9156	0
1997	LWB	Grand Caravan AWD	6262	0
1997	LWB	Grand Voyager	85397	2993
1997	LWB	Grand Caravan	171867	7194
1997	LWB	Town & Country	67481	0
1998	SWB	Voyager	46085	21486
1998	SWB	Caravan	85810	34689
1998	SWB	Town & Country	1622	0
1998	LWB	Town & Country AWD	8128	0
1998	LWB	Grand Caravan AWD	6952	0
1998	LWB	Grand Voyager	88936	0
1998	LWB	Grand Caravan	169339	0
1998	LWB	Town & Country	66944	0
1999	SWB	Voyager	31044	18245
1999	SWB	Caravan	56993	35894
1999	\$WB	Town & Country	993	0
1999	LWB	Town & Country AWD	6705	0
1999	LWB	Grand Caravan AWD	6053	0
1999	LWB	Grand Voyager	61688	0
1999	LWB	Grand Carayan	126053	0
1999	LWB	Town & Country	47051	0



## Enclosure 2

Measurement	LWB (mm)	SWB (mm)
a) frt axle to maxle	3030.0	2877.8
b) frt axle to nipple weld	2389.7	2211.7
frt axle to nipple end	2425.5	2247.5
c) frt axle to spring bolt	2278.5	2126.5
d) frt axle to filler bottom of hose	2410.8	2231.5
frt axle to tube bottom	2444.6	2268.1
frt axle to filler top end	2733.3	2581.8
frt axle to first bend (top)	2667.9	2516.8
frt axle to 2nd bend	2623.5	2472.2
frt axle to 3rd bend	2471.8	2295.1
frt axle to filler door center	2742.1	2589.9
e) frt axle to shock bolt	2713.9	2561.4
f) sill pinch to sill pinch	1545.3	1685.7
g) veh CL to sill pinch	822.7	842.8
veh CL to sill vertical wall	712.7	712.7
veh CL to outboard rail	505.9(top) 501.4(bottom)	505.9(top) 501.6(bottom)
h) veh CL to filler bottom of hose	533.1	523.1
veh CL to tube bottom	572.4	562.0
veh CL to filler top end	898.0	898.0
veh CL to first bend (top)	692.5	692.5
veh CL to 2nd bend	711.5	711.5
veh CL to 3rd bend	586.2	583.2
veh CL to filler door	959.4	959.4
i) sill to frt bolt of rr spring	190.6	191.3
sill to btm of nipple weld	228.8	226.7
sill to bottom of rail	98.9	95.1
sill to axis it in shock bolt	37.6	32.7
j) btm edge of nipple to nipple end	68.5	68.5
btm edge of nipple to btm of filler hose	30.7	20.9
btm edge of nipple to tube btm	104.5	94.9
btm edge of nipple to filler top	607.6	613.1
btm edge of nipple to first bend(tcp)	410.6	417.1
btm edge of nipple to 2nd bend	198.3	204.8
btm edge of nipple to 3rd bend	175.2	172.7

## DaimlerChrysler

RECEIVED

99 APR 19 AM11: 12

April 9, 1999

SEFECTS INVESTIGATION OPPORATION

Lewis H. Goldfarb Vice President

Regulation and Distribution

and Associate General Counser

Ms. Heidi Coleman Assistant Chief Counsel National Highway Traffic Safety Administration 400 Seventh Street, S.W. (NCC-30; Room 5219) Washington, D.C. 20590

Re: Request for Confidential Treatment of Certain Documents Provided in Support of PE99-010

Dear Ms. Coleman:

DaimlerChrysler is submitting additional information to the Office of Defects Investigation (ODI) relating to Preliminary Evaluation (PE) 99-010 (NSA-122jlq). The documents submitted contain confidential information for which DaimlerChrysler respectfully requests protection, pursuant to Part 512 of NHTSA regulations.

DaimlerChrysler is submitting these confidential documents as part of our response to a February 19, 1999 information request from the OD. The remainder of the response has been submitted directly to the OD.

The legal justification for confidential treatment is based on the subject information relating to engineering drawings, internal product evaluation processes, and product performance testing, as follows.

#### **Engineering Drawings**

Engineering drawings of fuel systems and related vehicle components, as well as design details shown on other engineering drawings, are entitled to protection pursuant to NHTSA's class determination contained in Appendix B to Part 512.

#### Internal Product Evaluation Processes

The submitted engineering specifications, engineering standards, crash and other test lists and results contain results of DaimlerChrysler's internal product evaluation processes for FMVSS 214 and 301 development, in addition to other product functional requirements. These documents are confidential because they reveal competitively sensitive information about the product performance factors that DaimlerChrysler considers significant in developing and marketing a product. A competitor to DaimlerChrysler would value this information because it would enable the competitor to improve its understanding of the performance factors that DaimlerChrysler baliaves are important to DalmlerChrysler vehicle customers, thus imposing significant competitive harm on DaimlerChrysler. See e.g., Occidental Petroleum Corp. v. S.E.C., 873 F.2d 325, 341 (D.C. Cir. 1979) (information concerning new product development is "valuable intellectual property" entitled to protection from public disclosure under Exemption 4).

#### Voluntary Product Performance Testing

Product test data, measurements and reports, for which DaimlerChrysler claims confidentiality reveal the results of product performance testing conducted voluntarily by DaimlerChrysler at its expense. These tests were conducted for the purpose of aiding in understanding the crash test and other usage performance of our vehicle designs.

These performance measurements are entitled to protection because they reveal research conducted by DaimierChrysler on its own vehicles at its expense, the results of which could not be duplicated without significant

Daimler Chrysler Corporation 1000 Chrysler Drive I CMS 485-13-65 Auburn 41-9 ML USA 48326 7766 Phone 248,512,4129 Fax 248,512,4202

A Company of the DemlerChrysler Group

Figure 248.5:2.4122
Fax 248.5:2.4202
a mail. hg1@da mierchryslerinn:

Ms. Heid' Coleman April 9, 1999 Page 2 of 2

reverse engineering effort and expense. Release of this information would allow a competitor to obtain the benefit of DaimlerChrysler's research without having to invest in conducting its own reverse engineering of the DaimlerChrysler product. DaimlerChrysler, on the other hand, would benefit by obtaining any similar information from its competitors. Thus, the documents are entitled to confidential protection. See, e.g., Worthington Compressers, Inc. v. Costle, 662 F.2d at 51.

DaimlerChrysler has appended to this letter the certification required by regulation. If you need any clarifications or additional information, please contact me at (248) 512-4122. If you receive a request for disclosure of these documents before you have completed your review of our claim of confidentiality, DaimlerChrysler respectfully requests notification of the request and an opportunity to provide further justification for the confidential treatment of this information, if warranted.

Lewis H. Goldfar

Attachments: Certificate in Support of Request for Confidentiality

Confidential Attachment for Thomas Z. Cooper, Re: NSA-122jlq, PE99-010

Confidential Enclosures Re: NSA-122jlq; PE99-010

Thomas Z. Cooper

CC:

#### Certificate in Support of Request for Confidentiality.

- I, Susan M. Cischke, pursuant to the provisions of 49 C.F.R. Part 512, state as follows:
- (1) I am DaimlerChryster Corporation's "(DaimlerChrysler)" Vice President, Vehicle Certification, Compliance and Safety Affairs and I am authorized by DaimlerChrysler to execute documents on behalf of DaimlerChrysler.
- (2) The information contained in the indicated documents is confidential and proprietary data and is being submitted with the claim that is entitled to confidential treatment under 5 U.S.C. § 552 (b) (4).
- (3) I have personally inquired of the responsible DaimlerChrysler personnel who have authority in the normal course of business to release the information for which a claim of confidentiality has been made to ascertain whether such information has ever been released outside DaimlerChrysler, except as to DaimlerChrysler suppliers with the understanding that such information be kept confidential.
- (4) Based upon such inquiries, to the best of my knowledge, information and belief the information for which DaimlerChrysler has claimed confidential treatment has never been released or become available outside DaimlerChrysler, except as stated in Paragraph 3; and
- (5) I make no representations beyond those contained in this certificate and in particular, I make no representations as to whether this information may become available outside DaimlerChrysler because of unauthorized or inadvertent disclosure; and
  - (6) I certify under penalty of perjury that the foregoing is true and correct.

Executed on this 9th day of April 1999.

Sm aichke

Ms. Susan M. Cischke



## DaimlerChrysler RECEIVEO



99 FEB 12 FM 2:58

February 8, 1999

CORNE CERUCIA CONSTRUIR

Thomas Z. Cooper, Chief Vehicle Integrity Division Office of Defects Investigation National Highway Traffic Safety Administration 400 Seventh Street S.W. (NSA-12; Room 5326) Washington, D.C. 20590 DaimierChrysler Corporation

Susan M. Cischke Vice President Vehicle Certification, Compliance and Safety Affairs

Re: PE99-010

Dear Mr. Copper:

This responds to conversational requests related to an FMVSS 214D crash test of a 1999 Dodge Caravan conducted on January 5, 1999. These requests have been received from Mr. J. L. Quandt of your staff at and following a January 19, 1999 review of the tested vehicle at the MGA Proving Ground. DaimlerChrysler understands that you have subsequently opened Preilminary Evaluation (PE) 99-010, which was opened after a fuel filler hose separated from the fuel tank in the FMVSS 214D side impact crash test.

Inspection of the tested vehicle and reviews of DaimlerChrysler vehicle build records have not revealed any special cause for the separation observed after that January 5, 1999 test. As we have informed Mr. Quandt, DaimlerChrysler crash testing of similar vehicles, at least five in the same FMVSS 214 mode and another five in the required FMVSS 301 side impact mode, have not exhibited any fuel system issues. Preliminary reviews of DaimlerChrysler field experience records also found no vehicle fires related to similar separations, although additional searches will be conducted.

DaimlerChrysler is providing information informally requested so that both NHTSA and DaimlerChrysler may quickly and efficiently focus investigation efforts. Toward that objective, we suggest that PE99-010 primarily address whether fuel filler tube hose separation has occurred in crashes on the road. Fuel leakage in an FMVSS 214 simulation of a severe side impact was not expected, but is also not an FMVSS compliance issue, and not necessarily a safety-related defect under Federal Law. Our cooperative efforts should address the question of whether any action that would reasonably improve real-world safety is indicated.

We welcome discussion of questions you have during your review of the confidential information, which is being provided to NHTSA with a request for protection, pursuant to Part 512 of NHTSA regulations.

Sincerely.

Susan M. Cischke

Sm Cischke

co: Heidi Coleman



## ODI RESUME

INVESTIGATION: PE99-010

DATE UPGRADED: // -Jun-99

SUBJECT: Post-Collision Fuel System Integrity

DATE OPENED:

03-Feb-99

PROMPTED BY: IE99-001

PRINCIPAL ENGINEER: J. L. Quandt

MANUFACTURER: DaimlerChrysler Corporation

MODELS: NS-minivans (Dodge Caravan and Grand Caravan, Plymouth Voyager and Grand Voyager, and

Chrysler Town and Country) MODEL YEARS: 1996-99

VEHICLE POPULATION: 2,074,393 produced through April 3, 1999

PROBLEM DESCRIPTION: The filler tube assembly may be damaged or separate from the tank in

certain crash modes.

FAILURE REPORT SUMMARY

	ODI	MANUFACTURER	TOTAL
COMPLAINTS:	0	0	0
FIRES:	0	0	0
INJ INCID:	0	0	0
FAT INCID:	0	. 0	0
OTHER:	2	0	2

DESCRIPTION OF OTHER: FMVSS 214/SINCAP left-side impact tests resulting in filler neck assembly leakage.

ACTION: This Preliminary Evaluation has been upgraded.

ENGINEER:

DIV CHF:

SUMMARY: On January 5, 1999, a 1999 Dodge Caravan 3-door minivan was crash tested at the MGA Proving Ground in Burlington, Wisconsin to assess compliance with Federal Motor Vehicle Safety Standard No. 214, Side Impact Protection, NHTSA No. CX0305 (Figure 1). During the crash test the fuel filler assembly hose separated from the fuel tank fill nipple allowing approximately 11 gallons of test fuel to spill from the tank assembly (Figure 2). The tank, which has a nominal capacity of 20 gallons, had been filled with 18.43 gallons of Stoddard solvent for the test.

Prior to the FMVSS 214 crash test, two long wheelbase NS-minivans (1999 Dodge Grand Caravan 4-door minivans) had been crash tested at MGA in NHTSA's Side Impact New Car Assessment Program

continued

<u>SUMMARY</u>: (SINCAP). The first test, conducted on November 30, 1998 (MX0301), did not acquire the required dummy injury data and another test was scheduled. The second test was conducted on December 18, 1998 (MX0307), and resulted in trace leakage from an unidentified source in the vicinity of the fuel filler assembly. Subsequent inspection of filler assembly components identified the source of the leak as a small split in a plastic segment of the filler vent tube sandwiched between the steel filler tube and the left frame rail.

NHTSA SINCAP tests are conducted with the same 3,000 pound Moving Deformable Barrier and crash configuration as required by the dynamic portion of FMVSS 214. The FMVSS 214 dynamic impact test is conducted in a 27 degree "crabbed" configuration with a barrier impact speed of 33.5 mph. The test is meant to represent a side impact collision in which the striking vehicle is traveling 30 mph and the struck vehicle 15 mph. The SINCAP test is conducted with the same "crabbed" configuration and a barrier impact speed of 38.5 mph, representative of a collision in which the striking vehicle is traveling 34 mph and the target vehicle 17 mph.

The purpose of FMVSS 214 is to specify performance requirements for the protection of occupants in side impact crashes. All passenger cars built on or after September 1, 1993 (model year 1994) and all multi-purpose passenger vehicles, light trucks, and vans built on or after September 1, 1998 (model year 1999) are required to meet the side impact occupant protection requirements of FMVSS 214. Since September 1993, NHTSA has conducted 116 FMVSS 214 dynamic side impact tests with the first and only fuel leakage incident occurring in the test that prompted this investigation. Since September 1996, NHTSA has conducted 77 SINCAP tests with only two fuel leakage incidents, a fuel tank puncture in a 1999 Chevrolet S-10 pickup truck (PF99-009) and the previously cited 1999 Dodge Grand Caravan (MX0307).

Although NHTSA has considered the FMVSS 214 dynamic test as a possible replacement for the lateral impact portion of FMVSS 301, Fuel System Integrity, there currently is no fuel system performance requirements associated with FMVSS 214<sup>1</sup>. There are no performance requirements of any kind associated with the SINCAP tests, which are conducted each model year to provide consumers with new vehicle side impact crash performance information.

The subject filler neck assembly is routed from the filler door through the forward portion of the left-rear wheelhouse. A plastic liner covers the assembly in the wheelhouse. The assembly extends forward from the bottom of the wheelhouse, through a space between the inner sill wall and the left rail structural member, to the fuel fill and vent fittings of the fuel storage tank (Figure 3). The tank is mounted inboard the left rail structural member forward of the rear axie.

The filler neck assembly consists of the fuel filler tube and the fuel tank vent tube. A five

Chrysler has submitted comments to NHTSA in favor of replacing the current FMVSS 301 lateral test with the FMVSS 214 dynamic impact test on at least two occasions. Most recently, in a June 19, 1995 letter responding to an Advanced Notice of Proposed Rulemaking published by NHTSA in the April 12, 1995 Federal Register, Chrysler submitted the following comments in favor of using the FMVSS 214 dynamic impact test to assess fuel system integrity in lateral impacts:

Based on testing experience with both standards and comparison of the test conditions and impact energies of both tests, Chrysler agrees that the FMVSS 214 test is more directly related to motor vehicle safety and more practicable.

long hose connects the steel filler tube to a 40 mm (1.6 inch) ID high-density polyethylene (HDPE) spud on the side of the tank. The hose is secured to the filler tube and tank spud by standard worm drive type hose clamps.

ODI's analysis of the filler hose separation incident finds that the crash resulted in substantial collapse/buckling of the sill. Sill buckling resulted in collapse of the front wheelhouse structure and some torsional deformation of the rail member. Wheelhouse collapse forced the filler neck assembly into the rail member (Figure 4) and pushed the park brake cable tight against the lower section of the filler tube (Figure 5). Some downward displacement of the tank spud was also evident, apparently resulting from rail deformation. The relative displacement of the filler tube and tank spud produced a tensile load in the connecting hose (i.e., stretched the hose) which was great enough to cause the hose to slide up the tank spud and off the bead (Figure 7).

Factors believed to contribute to the risk of hose separation are: (1) the packaging/routing of the filler neck assembly near body components which experienced substantial crush deformation in the crash; (2) the relatively short length of the filler hose (approximately 3½ inches from clamp to clamp) resulting in greater joint loads per unit displacement between the spud and filler tube; and (3) several aspects of the tank spud hose joint design and manufacture which reduce its ability to resist hose pull-off forces, including low spud modulus, spud bead design, and the use of lubricants as assembly aids.

ODI's analysis of the two SINCAP test vehicles found evidence of similar filler tube loading and movement, rail deformation, hose stretch, and hose slippage on the tank spud. ODI's analysis of peer vehicle (Ford Windstar, Chevrolet Venture, and Toyota Sienna) performance in FMVSS 214 and SINCAP dynamic left-side impact tests found no similar evidence of fuel filler tube loading, hose stretch, or hose slippage.

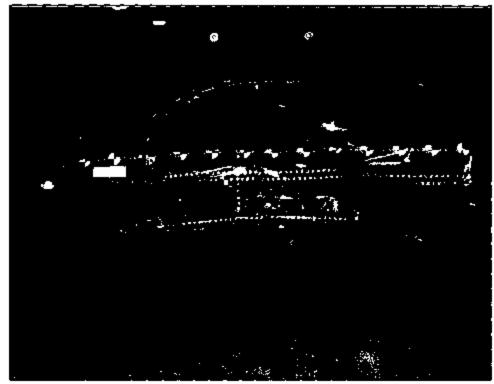


Figure 1 - Post-Test Body Crush (CX0305).



Figure 2 - Post-Test Filler Hose Separation (CX0305).

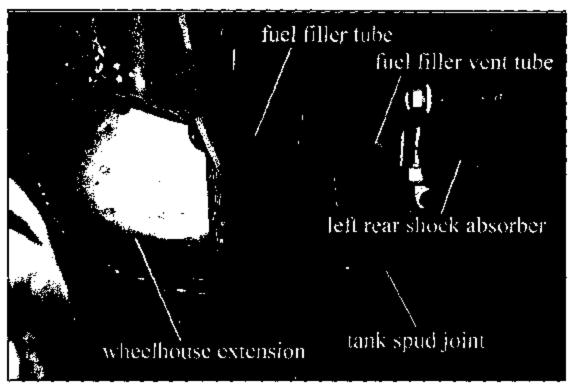


Figure 3 - Filler Neck Assembly Packaging/Routing (Exemplar Vehicle).

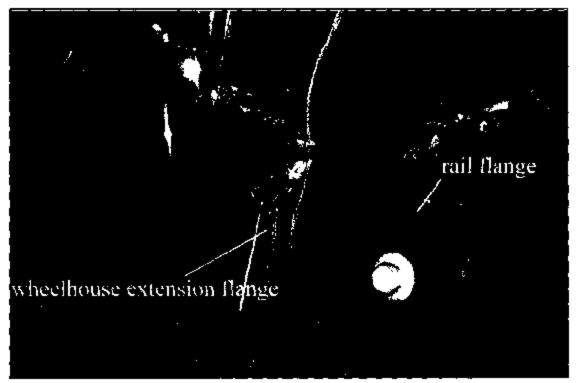


Figure 4 - Filler Tube Loading from Wheelhouse Extension (CX0305).

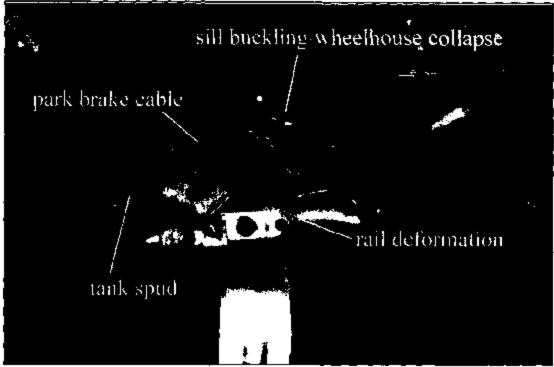


Figure 5 - Filler Tube Loading from Sill/Wheelhouse Collapse and Park Brake Cable (CX0305) - Bottom View, Filler Tube Hidden from View.

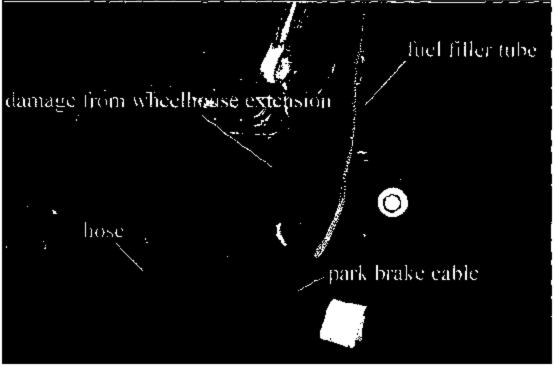


Figure 6 - Filler Neck Assembly Position/Damage (CX0305) - Side View, Body Sheet Metal Removed.

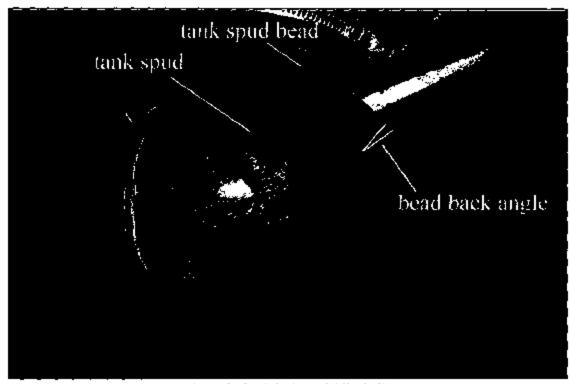


Figure 7 - Fuel Tank Spud (CX0305).



Figure 8 - Tank Spud Deformation - Axial View (CX0305).

## QUANDT

# PE99-010

<u>DATE</u>	SUBJECT	PAGE NUMBERS
02-03-99	OPENING RESUME (PROMPTED BY 1E99-001)	(2) (3)
02-19-99	Letter to Chrysler from ODI. Request for information on alleged potential for the fuel filler neck to separate from the fuel tan of 1996 through 1999 DaimlerChrysler NS-minivan vehicles	(4-10) k
02-26-99	MEMO TO VRTC FROM ODI	(11-12)
04-09- <b>99</b>	Letter to ODI from DaimlerChrysler. Response to ODI 2/19/99 lette ATTACHMENT	er (13) (14-23)
04-09-99	Letter to OCC from DaimierChrysier. Request for CONFIDENTIAL TREATMENT	(24-26)
02-08-99	Letter to ODI from DaimlerChrysler	(27)
06-11-99	CLOSING RESUME UPGRADED EA99-013	(28-34)

NSA-12 Quanat

JUL 25 2000

## CERTIFIED MAIL- RETURN RECEIPT REQUESTED

Lewis H. Goldfarb Vice President and Associate General Counsel DaimlerChrysler Corporation 1000 Chrysler Drive Auburn Hills, Michigan 48326-2766

RE: Confidentiality Determination/PE99-010

Dear Mr. Goldfarb:

This is in response to your letter dated April 9, 1999, in which you request confidential treatment for additional information submitted relating to PE99-010. Specifically, you request confidential treatment for enclosures 3, 4, 5, 6 and 7. Enclosure 3 includes copies of internal documents which you state "relate in reasonably direct ways to performance in a crash environment." Enclosure 3 contains compliance testing that was conducted pursuant to a modified method of testing that you developed at your own expense. Enclosure 4 is a listing of left-side impact crash testing. Enclosure 5 contains copies of test reports, photographs, and videotapes (this information is provided on microfiche.) You state that Enclosure 6 contains engineering drawings. (However, it appears that Enclosure 6 contains engineering specifications.) Enclosure 7 is a report of test separation forces and documents relating to forces required to separate the fuel filler hose from the fuel tank. You have requested confidential treatment for these materials for an unspecified period of time.

You state in your letter that the enclosures include the results of DaimlerChrysler's internal product evaluation process and of product performance testing that was conducted voluntarily by DaimlerChrysler at its expense. You state that some of the enclosures are engineering drawings that are entitled to protection pursuant to NHTSA's class determination contained in Appendix B to Part 512.

I have decided to grant your request for confidential treatment for these materials in part and to deny it in part.

## Self-Evaluative Privilege

In previous correspondence, the agency has noted that some courts have recognized a privilege for self-evaluative documents, <u>Bredice v. Doctors Hospital, Inc.</u>, 50 F.R.D. 249 (D.D.C. 1970), aff'd mem., 479 F.2d 920 (D.C. Cir. 1973), and that protection was extended to such privileged documents under Exemption 4 of the Freedom of Information Act (FOIA), 5 U.S.C. § 552(b)(4).

in Washington Post Co. v. United States Dep't of Justice, No. 84-3581, 1987 U.S. Dist. LEXIS 14936 (D.D.C. Sept. 25 1987) (magistrate's recommendation), adopted, No. 84-3581 (D.D.C. Dec. 15, 1987), rev'd in part on other grounds & remanded, 863 F.2d 96 (D.C. Cir. 1988).

Upon further review of the case law in this area, however, the agency has found that the privilege of self-critical analysis has not found a firm foothold in Federal law and that, in fact, the privilege has been recognized in only very limited circumstances, which are not applicable in this case. Sec, e.g., Andritz Sprout-Bauer v. Beazer East, Inc., 174 F.R.D. 609, 635 (M.D. Pa. 1997); Roberts v. Hunt, 187 F.R.D. 71 (W.D.N.Y. 1999). See also, University of Pennsylvania v. EEOC, 493 U.S. 182 (1990); First Eastern Corp. v. Mainwaring, 21 F.3d 465, 466 n.1 (D.C. Cir. 1994). The D.C. Circuit Court has ruled that, "[W]hatever may be the status of the 'self-evaluative' privilege in the context of private litigation, courts with apparent uniformity have refused its application where, as here, the documents in question have been sought by a governmental agency." Federal Trade Commission v. TRW, Inc., 628 F.2d 207, 210 (D.C. Cir. 1980). See also, In re July 5, 1999. Explosion at Kaiser Aluminum & Chemical Co., Gramercy Works Facility, 1999 U.S. Dist. LEXIS 14107 (E.D. La. Sept. 10, 1999). According to the D.C. Circuit, recognition of this privilege would not be consistent with the "strong public interest in having administrative investigations proceed expeditiously and without impediment." Federal Trade Commission, at 210.

Accordingly, these materials will not be protected under the self-evaluative privilege because the agency no longer recognizes the privilege except in the very limited circumstances discussed above.

## Class Determination

In its request, DaimlerChrysler asserts that Enclosure 6 contains engineering drawings that are entitled to protection pursuant to NHTSA's class determination contained in Appendix B of Part 512. However, based on our review of these materials, it appears that Enclosure 6 contains only engineering specifications and not drawings, and that these materials do not fall within the class determinations set forth in Appendix B of Part 512. The class determinations set forth in Appendix B are for blueprints and engineering drawings, future specific model plans and future vehicle production or sales figures for specific models. The materials you submitted in Enclosure 6 do not fall under any of the categories outlined above.

### Competitive Harm

Accordingly, I have considered whether these materials are entitled to confidential treatment because their release would cause competitive harm to DaimlerChrysler. I have decided to deny your request for confidential treatment for the following materials enclosed with your submission.

Enclosure 3, Item 8 - Compliance Procedure/CP 246/Change G;

Enclosure 3, Item 9 - Compliance Procedure/CP 233/Change H:

Enclosure 3, Item 10 - Compliance Procedure/CP 260/Change D;

Enclosure 3, Item 11 - Compliance Procedure/CP 190/Change K;

Enclosure 3, Item 12 - Compliance Procedure/CP 232/Change F;

Enclosure 3, Item 13 - Compliance Procedure/CP 234/Change I;

Enclosure 3, Item 14 - Compliance Procedure/CP 245/Change F:

Enclosure 3, Item 15 - Compliance Procedure/CP 319/Change A; and

Enclosure 4 in its entirety.

These materials appear to contain compliance procedures that follow the Federal Motor Vehicle Safety Standard (FMVSS) 301 and testing conducted pursuant to the FMVSS 301. DaimlerChrysler has not demonstrated, and we are unable to find based on the information that you have submitted, that the release of these materials would cause substantial competitive harm to DaimlerChrysler. Public Citizen Health Research Group v. Food and Drug Administration, 704 F.2d 1280 (D.C. Cir. 1983).

I have reviewed the other portions of your submission, including the other materials that you claim are entitled to confidential treatment and the arguments that you assert in support of your claim. While I have not reached a conclusion regarding each individual argument that you assert, I have concluded based upon your submission as a whole that the public release of the remaining materials in Enclosure 3, and of Enclosures 5, 6 and 7 in their entirety is likely to cause substantial competitive harm to DaimlerChrysler and, therefore, is entitled to confidential treatment pursuant to Exemption 4 of the Freedom of Information Act, 5 U.S.C. §552(b)(4). These materials will be protected for an indefinite period of time.

This partial grant of confidential treatment is subject to certain conditions since the pertinent information was submitted in connection with a defect investigation by the agency. The information may be disclosed under the authority of 49 U.S.C. §30167(b) and 49 C.F.R. §512.9(a)(2), if the agency decides the disclosure will assist the agency in carrying out the purposes of 49 U.S.C., Chapter 301.

In addition, the information may be disclosed under 49 C.F.R. §512.8, based upon newly discovered or changed facts, and you must inform the agency of any changed circumstances that may affect the protection of the information (49 C.F.R. §512.4(i)). Prior to the release of information under 49 C.F.R. §512.8 or §512.9, you would be notified in accordance with the procedure established by our regulations.

If you disagree with this determination, you may request reconsideration. The request for reconsideration must be submitted with additional written justification and the certification required by 49 C.F.R. §512.4(c) within 10 working days after your receipt of this letter. Such justification must show the particular competitive harm to your company from the disclosure of

the information for which confidentiality has been denied (49 C.F.R. §512.4(b)(3)) and contain any legal arguments and citations upon which you rely. Should we receive no justification within the required period of time, your submitted information will be placed in the public file.

Sincerely,

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Heidi L. Coleman Assistant Chief Counsel for General Law